

CURRENT CLAIMS SCHEDULE:

- 1 1. (Currently Amended) A method for controlling calls in a telecommunication system
2 comprising the steps of:
3 defining a first switching model which does not support self-routing connec-
4 tionless communications and in which call control signaling and media switching are ef-
5 fectively coupled;
6 defining a second switching model which does support self-routing connec-
7 tionless communications and in which call control signaling and media switching are ef-
8 fectively decoupled, said telecommunications system being configured to switch substan-
9 tially no bearer traffic during said second switching model; and
10 at the initiation of a call or during the progress of the call assigning one of said
11 first and second switching models to said call.
- 1 2. (Previously Presented) The method as in claim 1, wherein said telecommunication
2 system is a converged services platform (CSP).
- 1 3. Cancelled.
- 1 4. (Previously Presented) The method as in claim 1, wherein said step of assigning is
2 performed on a call-by-call basis.
- 1 5. (Previously Presented) The method as in claim 1, wherein said step of assigning is
2 performed according to a host message.
- 1 6. (Previously Presented) The method as in claim 5, wherein said step of assigning de-
2 faults to a particular switching model in the event said host message is unavailable.

- 1 7. (Previously Presented) The method as in claim 1, wherein said step of assigning is
2 performed dynamically one or more times during said call.
- 1 8. (Previously Presented) The method as in claim 1, further comprising the step of: pro-
2 viding media resources arranged on a media server.
- 1 9. (Previously Presented) The method as in claim 8, wherein said media resources are
2 selected from a group consisting of: generating tones, detecting tones, providing confer-
3 encing, recording announcements, and playing announcements.
- 1 10. (Previously Presented) The method as in claim 8, wherein said media server is co-
2 located with switching hardware of said telecommunication system.
- 1 11. (Previously Presented) The method as in claim 8, wherein said media server is geo-
2 graphically remote from said switching hardware of said telecommunication system.
- 1 12. (Previously Presented) The method as in claim 1, further comprising the step of:
2 modifying existing telecommunication switching platforms with operating software to
3 meet capabilities of assigning one of said first and second switching models to said call.
- 1 13. (Previously Presented) The method as in claim 1, further comprising the step of: es-
2 tablishing an early media path prior to receiving an answer to said initiation of said call.
- 1 14. (Previously Presented) The method as in claim 13, wherein said early media path
2 plays a recorded announcement.

1 15. (Previously Presented) The method as in claim 1, further comprising the step of:
2 transitioning between a 2-way voice path and a 2-way data path during said call.

1 16. (Currently Amended) The method as in claim 15, wherein said data path is used for
2 transmitting data from a data communication device, ~~such as a fax or modem.~~

1 17. (Previously Presented) The method as in claim 1, further comprising the step of:
2 augmenting a 2-way voice path with a 2-way data path during said call.

1 18. (Currently Amended) The method as in claim 17, wherein said data path is used for
2 transmitting data from a data communication device, ~~such as a fax or modem.~~

1 19. (Previously Presented) The method as in claim 1, wherein said telecommunication
2 system is configured as an interactive voice response (IVR) system.

1 20. (Previously Presented) The method as in claim 19, wherein said IVR system pro-
2 vides a prepaid calling service.

1 21. (Currently Amended) ~~The method as in claim 19, further comprising the steps of:~~

2 A method for controlling calls in a telecommunications system configured as an
3 interactive voice response (IVR) system, said method comprising the steps of:

4 defining a first switching model in which call control signaling and media switch-
5 ing are effectively coupled;

6 defining a second switching model in which call control signaling and media
7 switching are effectively decoupled;

8 at the initiation of a call or during the progress of the call, assigning one of said
9 first and second switching models to said call;

10 providing a two-way RTP voice path from a first session initiation protocol end-
11 point to a second telecommunication system having said interactive voice response sys-
12 tem;

13 establishing a two-way TDM voice path between said interactive voice response
14 system and with said second telecommunication system;

15 obtaining DTMF digits from said interactive voice response system;

16 after information is obtained from said interactive voice response system:

17 i) issuing messages to a second session initiation protocol end-point;

18 ii) establishing a two-way RTP voice path between said first session initiation
19 protocol end-point and said second session initiation protocol end-point;
20 and

21 iii) releasing said channel established between said interactive voice response
22 system and said second telecommunication system; and

23 establishing a two-way RTP voice path between said first end-point and said sec-
24 ond end-point.

1 22. (Currently Amended) ~~The method as in claim 1, wherein assigning said second~~
2 ~~switching model further comprises the steps of:~~

3 A method for controlling calls in a telecommunication system comprising the
4 steps of:

5 defining a first switching model in which call control signaling and media switch-
6 ing are effectively coupled;

7 defining a second switching model in which call control signaling and media
8 switching are effectively decoupled;

9 at the initiation of a call or during the progress of the call, assigning one of said
10 first and second switching models to said call, and wherein assigning said second switch-

11 | ing model includes establishing a two-way RTP voice path between a first session initia-
12 | tion protocol end-point and a second session initiation protocol end-point, by said tele-
13 | communication system performing the following:

- 14 | i) receiving a message from said first end-point and in response thereto, issu-
15 | ing a Request for Service with a data message to an associated host, with
16 | Session Description Protocol data of said first end-point contained within
17 | said data message, via an application programming interface with said
18 | host;
- 19 | ii) receiving a Route Control message generated by said host, and in response
20 | signaling a call to said second end-point using an available voice over IP
21 | channel;
- 22 | iii) issuing to said second end-point an invite message, which includes said
23 | first end-point Session Description Protocol as data, and waiting for said
24 | second end-point to return a ringing message;
- 25 | iv) in response, issuing a ringing message to said first end-point and subse-
26 | quently receiving from said second end-point, an OK message indicating
27 | that said second end-point is available to accept said call initiated by said
28 | first end-point;
- 29 | v) issuing a message to said host with information regarding said first and
30 | second end-points and waiting for said host to respond with a message in-
31 | structing said telecommunication system to process said call in accordance
32 | with said second switching model; and
- 33 | vi) issuing further messages to establish a two-way RTP voice path between
34 | said first and second end-points.

1 | 23. (New) The method as in claim 22, wherein said invite message is a SIP INVITE
2 | message.

1 24. (Previously Presented) The method as in claim 22, further comprising the step of:
2 establishing an early media path between said telecommunication system and said host to
3 establish a two-way RTP early voice path between said first and second end-points.

1 25. (Previously Presented) The method as in claim 24, wherein said second end-point
2 plays a recorded announcement via said RTP early voice path.

1 26. (Previously Presented) The method as in claim 25, wherein a media server is acting
2 on behalf of said second end-point.

1 27. (Previously Presented) The method as in claim 22, further comprising the step of:
2 transitioning from said two-way RTP voice path to a two-way RTP data path upon said
3 telecommunication system receiving a re-invite message from said second session initia-
4 tion protocol end-point.

1 28. (Previously Presented) The method as in claim 27, wherein said re-invite message is
2 a SIP RE-INVITE message.

1 29. (Previously Presented) The method as in claim 27, further comprising the steps of:
2 providing an internal media data transfer at said telecommunication system; and
3 issuing a re-invite message to said first end-point, to establish a two-way RTP
4 Data path between said first end-point and said second end-point.

1 30. (Currently Amended) A telecommunication system comprising:
2 switching hardware having circuitry for operating under a first switching model
3 and in which call control signaling and media switching are effectively coupled, and a
4 second switching model which does support self-routing connectionless communications

5 and in which call control signaling and media switching are effectively decoupled, said
6 telecommunication system being configured to switch substantially no bearer traffic; and
7 a processor to assign one of said first and second switching models to said call at
8 the initiation of a call or during the progress of the call.

1 31. (Previously Presented) The telecommunication system as in claim 30, wherein said
2 telecommunication system is a converged services platform (CSP).

1 32. Cancelled.

1 33. (Previously Presented) The telecommunication system as in claim 30, wherein said
2 processor assigns said switching models on a call-by-call basis.

1 34. (Previously Presented) The telecommunication system as in claim 30, wherein said
2 processor assigns said switching models in response to a host message.

1 35. (Previously Presented) The telecommunication system as in claim 34, wherein said
2 step of assigning defaults to a particular switching model in the event said host message
3 is unavailable.

1 36. (Previously Presented) The telecommunication system as in claim 30, wherein said
2 processor assigns said switching models dynamically one or more times during said call.

1 37. (Previously Presented) The telecommunication system as in claim 30, further com-
2 prising: a media server for providing media resources.

1 38. (Previously Presented) The telecommunication system as in claim 37, wherein said
2 media resources are selected from a group consisting of: generating tones, detecting
3 tones, providing conferencing, recording announcements, and playing announcements.

1 39. (Previously Presented) The telecommunication system as in claim 37, wherein said
2 media server is co-located with switching hardware of said telecommunication system.

1 40. (Previously Presented) The telecommunication system as in claim 37, wherein said
2 media server is geographically remote from said switching hardware of said telecommu-
3 nication system.

1 41. (Previously Presented) The telecommunication system as in claim 30, further com-
2 prising: operating software for modifying existing telecommunication switching plat-
3 forms to meet capabilities of assigning one of said first and second switching models to
4 said call.

1 42. (Previously Presented) The telecommunication system as in claim 30, wherein an
2 early media path is established prior to receiving an answer to said initiation of said call.

1 43. (Previously Presented) The telecommunication system as in claim 42, wherein said
2 early media path is utilized for playing a recorded announcement.

1 44. (Previously Presented) The telecommunication system as in claim 30, wherein said
2 switching hardware transitions between a 2-way voice path and a 2-way data path during
3 said call.

1 45. (Previously Presented) The telecommunication system as in claim 30, wherein said
2 switching hardware augments a 2-way voice path with a 2-way data path during said call.

1 46. (Currently Amended) The telecommunication system as in claim 44, wherein said
2 data path is used for transmitting data from a data communication device, ~~such as a fax or~~
3 ~~modem~~.

1 47. (Previously Presented) The telecommunication system as in claim 30, wherein said
2 telecommunication system is configured as an interactive voice response (IVR) system.

1 48. (Previously Presented) The telecommunication system as in claim 47, wherein said
2 IVR system provides a prepaid calling service.

1 49. (Currently Amended) A telecommunication system comprising:

2 means for defining a first switching model which does not support self-routing
3 connectionless communications and in which call control signaling and media switching
4 are effectively coupled;

5 means for defining a second switching model which does support self-routing
6 connectionless communications and in which call control signaling and media switching
7 are effectively decoupled, said telecommunications system being configured to support
8 substantially no bearer traffic during said secondary switching model; and

9 means for assigning one of said first and second switching models to said call at
10 the initiation of a call or during the progress of the call.